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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,962	10/31/2000	Eric A. Pulsipher	10008103-1	3416
22879	7590	09/23/2004	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			NGUYEN, PHUOC H	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/703,962

Applicant(s)

PULSIPHER ET AL.

Examiner

Phuoc H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The amendments filed June 15, 2004 are objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In every independent claims, the applicant amended as dated above the intermediate node is not aware that the node exists wherein these limitations introduce new matter into the disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

### *Response to Arguments*

2. Applicant's arguments filed June 15, 2004 have been fully considered but they are not persuasive.

The applicant argues in page 5 for independent claims that the cited reference does not disclose the intermediate node is not aware that the node exists. The examiner respectfully submits that the intermediate node is not aware that the node exists is a new subject matter that was introduced in the amendment. As clearly stated above, the examiner disregards this particular limitation "the intermediate node is not aware that the node exists". Based on the claim language without that limitation, the cited reference still meets the rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 21-40 rejected under 35 U.S.C. 102(e) as being anticipated by Wood U.S. Patent 6,405,248.

5. Regarding claims 21 and 32, Wood reference discloses identifying a link directly coupling a host (eg. node g or h of figure 6a) to a first port of a node (eg. switch A; figure 6a teaches a node g is connected to the first port of switch A); identifying an intermediate connection which indirectly couples the host to an intermediate node (eg. switch B) (Figure 6a teaches switch B is indirectly connected to host g or h); generating a new tuple identifying a relationship between the node and the intermediate node based on the identified intermediate connection and the direct link, wherein the new tuple indicated that the node is directly coupled to the intermediate node (eg. identifying the link and node ports, and the ports and devices are logically groped in order to provide an accurate topology; Abstract).

6. Regarding claims 22 and 33, Wood reference discloses the host is a singly-heard-host which is the only host heard on the first port of the node (6a teaches a node g is connected to the first port of switch A).

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7. Regarding claims 23 and 34, Wood reference discloses the singly-heard-host is at least one of a workstation, a personal computer, a terminal and a printer (Figures 5, and 6).

8. Regarding claims 24 and 35, Wood reference discloses the tuple and the new tuple contain data associated with a topology of the network (Abstract).

9. Regarding claims 25 and 36, Wood reference discloses determining that the node is directly coupled to the intermediate node via a second port of the node (Figure 6a teaches switch B (eg. intermediate node) is directly connected to port 3 of the switch A (eg. node)).

10. Regarding claims 26 and 27, Wood reference discloses storing the new tuple in the intermediate node/ node/ a database (Abstract; and col. 7, last paragraph).

11. Regarding claims 28 and 38, Wood reference discloses determining whether the host is heard only by the first port of the node, and if the host is heard only by the first port of the node, classifying the new tuple as the singly-heard host link tuple (eg. a node g is directly connected to the first port of switch A) (Figure 6A).

12. Regarding claims 29 and 39, Wood reference discloses determining if another node hears the host as a singly-heard host, and if another node hears the host, classifying the new tuple as a singly-heard conflict link tuple, and resolving a conflict associated with the host between the node and the another node (Figures 5 and 12; col. 9, lines 65 through col. 10, lines 19; and col. 17, lines 9-40).

13. Regarding claims 30,31, and 40, Wood reference discloses generating an extra host link tuple for the intermediate node indirectly coupled to the host via the intermediate connection, examining the singly heard host link tuple and the extra host

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link tuple, and based on the examining if the node is determined to be connected to the host and the intermediate node is determined to be connected to the host, generating a conn-to-conn link (eg. direct connection between switch A port 3 to switch B port 1) tuple between the node and the intermediate node (Figure 6A).

### *Conclusion*

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Black U.S. Patent 5,297,138** discloses determining physical topology across repeaters and bridges in a computer network.

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**Phaal U.S. Patent 5,450,408** discloses method of ascertaining topology features of a network.

**Orr et al U.S. Patent 5,727,157** disclose apparatus and method for determining a compute network topology.

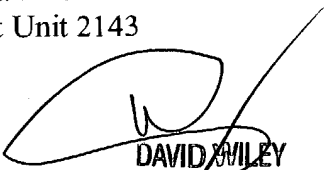
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Phuoc H. Nguyen** whose telephone number is 703-305-5315. The examiner can normally be reached on Mon -Thu (7AM-4: 30PM) and off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **David A Wiley** can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 13, 2004

Phuoc H. Nguyen  
Examiner  
Art Unit 2143

  
**DAVID WILEY**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100